

PROJECT NUMBER: 1101
PROJECT TITLE: Entomological Research
PROJECT LEADER: Dr. L. Faustini
WRITTEN BY: L. Ryan
PERIOD COVERED: November, 1988

I. PHYSIOLOGICAL STUDIES OF THE CIGARETTE BEETLE (CB)

A. METHOPRENE

1. Objective: To determine the most efficient use of the insect growth regulator (methoprene) within R&D's CB management program.
2. Results: There appears to be no sufficient loss of methoprene during the expansion process (1).
 - Studies are underway to determine the optimal methoprene dose for stems and scraps (2).
 - Discussions with Analytical personnel (3) regarding methods development to detect methoprene residues below 2 ppm and on Oriental tobacco were reported (4).

B. GLOBAL ECOLOGY

1. Objective: To determine the distribution and abundance of the CB as it relates to the processing of tobacco into cigarettes.
2. Results: Program initiated in Burley extruders at Bowling Green and Lexington and the Burley stemmery at Lexington. All Processing facilities belong to Southwestern Tobacco Company itself a Universal Leaf Company (5).

C. PESTICIDES

1. Objective: Provide a list of pesticides acceptable for potential use at PM facilities.
2. Results: Various consultations on pesticides were documented this month (6-10).

D. SERVICE TO OTHERS

1. Objective: To provide technical services to areas outside R&D.
2. Results: Recommendations for handling bulk RL, BL, and OR to prevent CB infestations were given (11).
 - Advice on implementing 100% Kabat® usage was given at a meeting held to address this topic (12).
 - Methoprene residues on Colombian strip were determined (8).

E. OTHER

- L. Ryan attended an "Advanced Course on Pest Recognition" (13).
- Polyethylene lined scrap tobacco, phosphine fumigated at Park 500 was cleared for use (14).
- D. L. Faustini assisted Miller Brewing Company, Fort Worth, TX with the carbon dioxide fumigation of an empty grain silo.
- D. L. Faustini attended an AMA "Basic Project Management Course" (15).

F. REFERENCES

1. Ryan, L. Memo to Faustini, D. L. Methoprene residues pre- and post- expansion process. 11/11/88.
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3. Ryan, L. Memo to Distribution. Methoprene Residues Detection. 10/3/88.
4. Lehman, R. Memo to Distribution. Methoprene Analysis Meeting of October 19, 1988. 11/2/88.
5. Ryan, L. Memo to Faustini, D. L. Cigarette Beetle (CB) Pheromone trap monitoring program at Universal Leaf Tobacco Company, Inc. (ULT) Facilities. 11/8/88.
6. Ryan, L. Memo to Schafer, D. Pesticides used in Public Warehouses. 11/14/88.
7. Ryan, L. Notebook #8533 p. 17.
8. Ryan, L. Memo to Ganteaume, H. Methoprene residues. 11/11/88.
9. Faustini, D. L. Memo to Ellis, C. K. General Foods Conversation. 11/1/88.
10. Faustini, D. L. Memo to Schulthess, D. Contact Space Spray Insecticides. 10/14/88,
11. Faustini, D. L. Memo to Haller, D. Bulk Tobacco handling process - Cigarette Beetle Concerns. 11/10/88.
12. Koval, G. A. Memo to Distribution. Plan for 100% Kabat® usage. 10/24/88.
13. Ryan, L. Memo to Faustini, D. L. Okumura Biological Institute (OBI) Course. 11/11/88.
14. Lehman, R. Notebook #8740 p. 1.

15. Faustini, D. L. Memo to Distribution. Trip Report - Basic Project Management Course, AMA, Wash. D.C. 10/13/88.

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